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DIALOG(R)File 50:CAB Abstracts

02981317 CAB Accession Number: 950401183
****Informatics** and **robotics** on **dairy** **farms**.**
Ferretti, D.; Fortunato, A.; Ippolito, M.; Rizzi, C.
PFR, c/o ITIA - CNR, Viale Lombardia, 20; I 20131 Milano, Italy.
Enabling technologies for land use and resource management. Proceedings 5th International Congress for Computer Technology in Agriculture 29 June to 5 July, 1994, Stoneleigh Park, Warwickshire, UK.
Conference Title: Enabling technologies for land use and resource management. Proceedings 5th International Congress for Computer Technology in Agriculture 29 June to 5 July, 1994, Stoneleigh Park, Warwickshire, UK.
p.74-78
Publication Year: 1994
Publisher: Royal Agricultural Society of England, National Agricultural Centre -- Kenilworth, UK
ISBN: 0-7084-0546-0
Language: English
Document Type: Conference paper
This paper presents a prototype for the design and simulation of an automated dairy farm. Such a system allows the design and the evaluation of different technical solutions via graphic simulation before constructing and assembling the whole system. The prototype consists of 2 tools: PHIL (Polyhedral Hybrid modellIng Library), and ROBSIM (ROBotic SIMulator). The former is a polyhedral solid modeller that allows the modelling of all elements involved in the process simulation (e.g., cow, milking robot). PHIL includes special features dedicated to robotics applications. ROBSIM allows the workcell assembling (e.g. the milking robot) and the planning of robot tasks, with the emphasis on the analysis of interactions among devices (e.g., robot arm) and objects (e.g., cow teats) present in the environment. Specific modules for proximity sensors simulation have been also developed: this may be useful, e.g. for the correct positioning of the gripper with respect to the cow's teats. To test the system, particular attention was devoted to the milking process. It was planned to extend the experimentation to the study of dairy farm layout. This research has been supported by the National Research Council of Italy, Special Project RAISA. 11 ref.
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DIALOG(R)File 5:Biosis Previews(R)

0013985569 BIOSIS NO.: 200200579080
****Graphic** monitoring of the course of some clinical conditions in dairy cows using a Computerized Dairy Management System**
AUTHOR: Moallem U (Reprint); Gur P; Shpigel N; Maltz E (Reprint); Livshin N (Reprint); Yacoby S (Reprint); Antman A; Aizinbud E (Reprint)
AUTHOR ADDRESS: Agricultural Research Organization, The Volcani Center, 50250, Bet Dagan, Israel**Israel
JOURNAL: Israel Journal of Veterinary Medicine 57 (2): p43-64 2002 2002
MEDIUM: print
ISSN: 0334-9152
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The presented data was obtained in two Israeli **dairy** **farms** of 180 and 276 milking cows each, using a Computerized Dairy Management System. Its software program included a **graphic** display. The system recorded, stored and processed data from three sources: 1) Data obtained daily and automatically by sensors (milk yields; milk production rate; milk electrical conductivity; walking activity; live body weight). 2) Data downloaded monthly from the database of the Israel Cattle Breeders Association (milk somatic cell counts, milk fat, protein and lactose content). 3) Data typed in by the farmer by the time it was available (body condition score, heats, inseminations, veterinarian's diagnoses and treatments). Changes in above-mentioned indices take place as a result of diseases. The dynamics of various graphically displayed indices were studied in about 350 cases of clinical and stress incidents. The presented typical graphs enabled both the dairy producers and their veterinarians to monitor the onset, course, duration and severity of pathological conditions as reflected in the changes of appropriate indices. This has been demonstrated in cases of metabolic and reproductive disorders, mastitis, foot problems, digestive upset and stress incidents. The interpretation of the presented graphs allows the dairy producer to select animals for examinations by his veterinarian. It assist the veterinarian to monitor the outcome of treatment and to make the correct decision either to modify the treatment protocols if needed, or on the other hand, to cull the animal. Graphs of groups of animals provide the opportunity to define management trends and isolate weaknesses in management. The **graphic** display of the course of clinical events may also contribute to computer aided veterinary learning and to educating the **dairy** **farms**' operators.
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Kozumplik, Joanne (ASRC)

From: STIC-ILL
Sent: Monday, February 09, 2004 1:57 PM
To: Kozumplik, Joanne (ASRC)
Subject: FW: ILL Request from 3600

-----Original Message-----
From: Lehman, Karen
Sent: Monday, February 09, 2004 1:34 PM
To: STIC-ILL
Cc: Griffin, Etelka
Subject: ILL Request from 3600

For Examiner Tom Price 3D38

AU 3643

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AGL 2/10

These two articles:

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Karen